

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/06/03

Date Received: 02/06/03

Project: Metro Grab M69399, F&BI 302048

Date Extracted: 02/25/03

Date Analyzed: 02/26/03

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE  
FOR TOTAL METALS BY  
INDUCTIVELY COUPLED PLASMA (ICP)  
(METHOD 6010)**

Results Reported as mg/L (ppm)

<u>Sample ID</u> Laboratory ID	<u>Chromium</u>	<u>Copper</u>	<u>Nickel</u>	<u>Zinc</u>
M69399 302048-01	0.41	0.36	0.34	0.13
Method Blank	<0.05	<0.05	<0.05	<0.05

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## ENVIRONMENTAL CHEMISTS

Date of Report: 03/06/03

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Project: Metro Grab M69399, F&BI 302048

### QUALITY ASSURANCE RESULTS FROM TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 302048-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Chromium	mg/L (ppm)	0.41	0.46	11	0-20
Copper	mg/L (ppm)	0.36	0.34	6	0-20
Nickel	mg/L (ppm)	0.34	0.32	6	0-20
Zinc	mg/L (ppm)	0.13	0.21	a	0-20

Laboratory Code: 302048-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	% Recovery MS	Acceptance Criteria
Chromium	mg/L (ppm)	2	0.41	94	80-120
Copper	mg/L (ppm)	2	0.36	96	80-120
Nickel	mg/L (ppm)	4	0.34	93	80-120
Zinc	mg/L (ppm)	2	0.13	92	80-120

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	% Recovery LCS	% Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Chromium	mg/L (ppm)	2	99	100	80-120	1
Copper	mg/L (ppm)	2	100	101	80-120	1
Nickel	mg/L (ppm)	4	98	99	80-120	1
Zinc	mg/L (ppm)	2	100	102	80-120	2

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.  
Charlene Morrow, M.S.  
Yelena Aravkina, M.S.  
Bradley T. Benson, B.S.  
Kurt Johnson, B.S.

3012 16th Avenue West  
Seattle, WA 98119-2029  
TEL: (206) 285-8282  
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e-mail: fbi@isomedia.com

March 6, 2003

INVOICE #03ACU0306-1

Accounts Payable  
Alaskan Copper Works  
628 South Hanford  
Seattle, WA 98134

RE: Project Metro Grab M69399, F&BI 302048 - Results of testing requested by  
Gerry Thompson for material submitted on February 6, 2003.

1 sample analyzed for Total Chromium, Copper, Nickel and Zinc by Method 6010B @ \$80 per sample	\$ 80.00
Amount Due .....	\$ 80.00

FEDERAL TAX ID # (b) (6)

302048

## SAMPLE CHAIN OF CUSTODY

ME 02/06/03 AI<sub>2</sub>

Send Report To

G. Thompson

Company

ACW

Address

628 S. Harbor St

City, State, ZIP

Seattle WA 98134

Phone #

206-382-8779

Fax #

206-382-4309

SAMPLE # (signature)

PROJECT NAME/NO.

METRO Enab

PO #

M69355

REMARKS

Page # of

TURNAROUND TIME

☐ Standard (2 Weeks)☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Return samples☐ Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS					
M69355	01	2/6/03	12:00 PM	H2O	1											

Friedman &amp; Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE

Relinquished by:

Received by:

Relinquished by:

Received by:

PRINT NAME

G. Thompson

Tara E. Dehaff

COMPANY

ACW

F&amp;BI

DATE

2/6/03 1:18 PM

02/06/03 2:05 PM

TIME



FRIEDMAN & BRUYA, INC.

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March 6, 2003

Gerry Thompson, Project Manager  
Alaskan Copper Works  
628 South Hanford  
Seattle, WA 98134

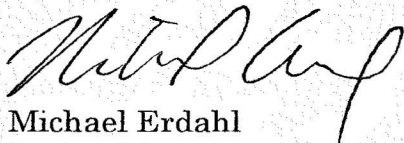
Dear Mr. Thompson:

Included are the results from the testing of material submitted on February 6, 2003 from the Metro Grab M69399, F&BI 302048 project. There are 2 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures  
ACU0306R.DOC